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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/650,894	08/28/2003	Jason Robert McGee	RSW920030102US1	RSW920030102US1 8718	
36736 DUKE W. YEI	7590 02/07/2008 E		EXAM	EXAMINER	
YEE & ASSOCIATES, P.C.		BUI, BR	YAN P		
P.O. BOX 802: DALLAS, TX			ART UNIT	PAPER NUMBER	
		•	2153		
			MAIL DATE	DELIVERY MODE	
			02/07/2008	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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		Application No.	Applicant(s)	
Office Action Summary		10/650,894	MCGEE ET AL.	
		Examiner	Art Unit	
		Bryan P. Bui	2153	,
Period f	The MAILING DATE of this communication or Reply	appears on the cover sheet w	th the correspondence addres	is
WHI - Extended aftended - If N - Fail Any	HORTENED STATUTORY PERIOD FOR RECHEVER IS LONGER, FROM THE MAILING ensions of time may be available under the provisions of 37 CF or SIX (6) MONTHS from the mailing date of this communication operiod for reply is specified above, the maximum statutory per uncerto reply within the set or extended period for reply will, by significantly received by the Office later than three months after the noned patent term adjustment. See 37 CFR 1.704(b).	ODATE OF THIS COMMUNION R 1.136(a). In no event, however, may a line in the community of th	CATION. reply be timely filed ITHS from the mailing date of this commu	
Status		•	·	
1)🛛	Responsive to communication(s) filed on 1	6 November 2007.	•	·
•	<u> </u>	This action is non-final.		•
3)[• •			rits is
	closed in accordance with the practice und	er <i>Ex parte Quayle</i> , 1935 C.D). 11, 453 O.G. 213.	
Disposi	tion of Claims		•	•
4)[X	Claim(s) 1-20 is/are pending in the applica	tion.		
	4a) Of the above claim(s) is/are with		·	
5)□	Claim(s) is/are allowed.			•
6)[🛛	Claim(s) <u>1-20</u> is/are rejected.			
7)	Claim(s) is/are objected to.			
8)	Claim(s) are subject to restriction ar	nd/or election requirement.		,
Applica	tion Papers			
9)□	The specification is objected to by the Exar	miner.		
10)区	The drawing(s) filed on <u>28 August 2003</u> is/a	are: a)⊠ accepted or b)□ ot	jected to by the Examiner.	
	Applicant may not request that any objection to			
_	Replacement drawing sheet(s) including the co			
11)∟	The oath or declaration is objected to by the	e Examiner. Note the attache	d Office Action or form PTO-1	152.
Priority	under 35 U.S.C. § 119		,	•
	Acknowledgment is made of a claim for for) All b) Some * c) None of:	eign priority under 35 U.S.C. {	§ 119(a)-(d) or (f).	
	1. Certified copies of the priority docun	nents have been received.		
	2. Certified copies of the priority docum	nents have been received in A	Application No	
	3. Copies of the certified copies of the	priority documents have beer	received in this National Sta	ge
	application from the International Bu			
*	See the attached detailed Office action for a	list of the certified copies not	received.	
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Attachme	• •	—	O (DTO 440)	
	ice of References Cited (PTO-892) ice of Draftsperson's Patent Drawing Review (PTO-948	· — =	Summary (PTO-413) s)/Mail Date	
3) 🔲 Info	ormation Disclosure Statement(s) (PTO/SB/08)	5) Notice of I	nformal Patent Application	
Pap	per No(s)/Mail Date	6) [Other:	 •	

10/650,894 Art Unit: 2153

DETAILED ACTION

- 1. This communication is responsive to the Amendment filed on 11/16/2007 to the original application No. 10/650894 filed on 08/28/2003.
- Claims 1-20 are pending, of which claims 1, 11, 19 and 20 are amended.
 Claims 1, 11 and 19 are independent claims.

Response to Amendment

- 3. Applicant's amendments to the specification appropriately address the objection due to the undue length of the abstract. Accordingly, this objection is withdrawn in view of Applicant's amendments.
- 4. Applicant's amendments to the claims appropriately address the objection to the claim 20 raised in the previous office action. Accordingly, the objection is withdrawn in view of Applicant's amendments.
- 5. Applicant's amendments to the claims appropriately address the rejections to the claims 1-20 under 35 U.S.C. 112, second paragraph raised in the previous office action. Accordingly, these rejections are withdrawn in view of Applicant's amendments.

Application/Control Number: 10/650,894

Art Unit: 2153

- 6. Applicant's amendments to the claims appropriately address the rejections to the claims 11-18 under 35 U.S.C. 101 raised in the previous office action. Accordingly, these rejections are withdrawn in view of Applicant's amendments.
- 7. The Examiner substantially maintains the First Action on the Merits rejections of claims 1, 3, 7, 10, 11, 13, 15, 18 and 19 under 35 U.S.C. 102(e) as being anticipated by Ramme (US Patent Application Publication No.2003/0093420 A1), in view of the amendment, with modifications corresponding to any amendment changes.
- 8. The Examiner substantially maintains the First Action on the Merits rejections of claims 2, 4, 5, 9, 12, 17 and 20 under 35 U.S.C. 103(a) as being unpatentable over Ramme (US Patent Application Publication No. 2003/0093420 A1) in view of Spotswood et al. (US Patent Application Publication No. 2004/0255293 A1).
- 9. The Examiner substantially maintains the First Action on the Merits rejections of claims 6, 8, 14 and 16 under 35 U.S.C. 103(a) as being unpatentable over Ramme (US Patent Application Publication No. 2003/0093420 A1) in view of Croney et al. (US Patent Application Publication No. 2004/0255233 A1).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

10/650,894 Art Unit: 2153

A person shall be entitled to a patent unless –

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 10. Claims 1, 3, 7, 10, 11, 13, 15, 18 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Ramme (US Patent Application Publication No.2003/0093420 A1) (hereinafter "Ramme").

Regarding claim 1, Ramme teaches a method comprising:

- A) "determining if the web application includes a reference to at least one shared web module that may be incorporated into a plurality of web applications"; and
 - B) "identifying a location of the at least one shared web module; and
- C) "logically merging the at least one shared web module with web modules of the web application, if any, to generate a logically merged web application"

With respect to A), the examiner notes that Ramme teaches the claimed features of "determining if the web application includes a reference to at least one shared web module that may be incorporated into a plurality of web applications" as [For information which is sharable among two or more entities such as

10/650,894 Art Unit: 2153

applications which have module files stored in module directories, the sharable information is stored in one of the module directories, and a link to that directory is stored in each of the directories of the modules that share the information] (see Ramme, paragraph [0013] on page 1).

With respect to B), the examiner notes that Ramme teaches the claimed features of "identifying a location of the at least one shared web module" as [A search may be performed by first searching the directory of the module. If the file is not found, then the link is used to access the directory upon which the module's directory depends, so that it may be searched in a similar manner. The search may continue iteratively from one directory to another, until the file is located] (see Ramme, paragraph [0031] on page 3).

With respect to C), the examiner notes that Ramme teaches the claimed features of "logically merging the at least one shared web module with web modules of the web application" as [For example, this particular arrangement of the files and links imposes a hierarchical structure on the directory storage, in the form of a directed acyclic graph] (see Ramme, paragraph [0035] together with Figure 1 elements (120,122, 124, 126)).

Regarding claim 3, Ramme further discloses the claimed feature of "determining if the web application includes a reference to at least one shared web

10/650,894 Art Unit: 2153

module includes determining if the web application includes a shared web module designation file" as [The link may be a real link, such as a Unix link, or it may be implemented as a file with a directory specification stored in association with the directory storage area] (see Ramme, paragraph [0057]) and [The link file may include all necessary information for accessing another software component, i.e., may include information on a dependent directory storage area and optionally, may include information on software component available at the dependent directory area] (see Ramme, paragraph [0058]).

Regarding claim 7, Ramme further discloses the claimed feature of "the steps of determining, identifying, and logically merging are performed during an initialization process of a runtime environment for initializing the web application to be run on a server" [the user processing device and the server unit may be part of a distributed system ...and the server unit may be accessed from the client unit over a network using the directory links] (see Ramme, paragraph [0281] and Figure 7).

Regarding claim 10, Ramme further discloses the claimed feature of "logically merging the at least one shared web module with web modules of the web application includes at least one of relinking references to the at least one shared web module in the web modules of the web application, extrapolating policy information for the at least

one shared web module from a policy file associated with the web application, and modifying a class path for the web application to include paths to each of the at least one shared web module" as [Thus, any application program accessing the first directory storage area regarding software components originally stored at this directory storage area will be redirected through the directory link to the second directory storage area now storing the software component. Thus, complicated updating operations of a potentially large number of directory links can be minimized or avoided] (see Ramme, paragraph [0049] on page 4 &5).

Regarding claims 11 and 19, all the limitations of those claims have been noted in the rejection of claim 1. Thus, they are rejected for the same rationale as claim 1.

Regarding claim 13, all the limitations of this claim have been noted in the rejection of claim 3. Thus, it is rejected for the same rationale as claim 3.

Regarding claim 15, all the limitations of this claim have been noted in the rejection of claim 7. Thus, it is rejected for the same rationale as claim 7.

Regarding claims 18, all the limitations of this claim have been noted in the rejection of claim 10. Thus, it is rejected for the same rationale as claim 10.

10/650,894 Art Unit: 2153

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 11. Claims 2, 4, 5, 9, 12, 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramme (US Patent Application Publication No. 2003/0093420 A1) in view of Spotswood et al. (US Patent Application Publication No. 2004/0255293 A1) ("Spotswood").

Regarding claim 2, most of the limitations of this claim have been noted in the rejection of claim 1. However, Ramme does not expressly disclose the claimed feature of "loading the logically merged web application into a web container". Spotswood et al, from the same or similar field of endeavors, discloses the application server constructs the application container with the application components in the order in which they were retrieved, resulting in a hierarchical classloader structure in the newly constructed application (see Spotswood, paragraph [0076] on page 5 together with Figure 6). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references to achieve the claimed feature of "loading the logically merged web application into a web container" (as cited

10/650,894 Art Unit: 2153

in claim 2). Such combination would have permitted teaching's Spotswood to allow Ramme's to better control over the reloading and namespace separation of individual modules, including EJB's (see Spotswood, paragraph [0019]).

Regarding claim 4, most of the limitations of this claim have been noted in the rejection of claim 1. However, Ramme does not expressly disclose the claimed feature of "the web application is an enterprise archive (EAR)" and "the logically merged web application is a logically merged EAR". Spotswood et al, from the same or similar field of endeavors, discloses an application is normally packaged in an Enterprise Archive (EAR) file containing application class (see Spotswood, paragraph [0049] on page 3 and Figure 3,element (150)). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references to achieve the claimed features of "the web application is an enterprise archive (EAR)" and "the logically merged web application is a logically merged EAR" (as cited in claim 4). Such combination would have permitted teaching's Spotswood to allow Ramme's to better control over the reloading and namespace separation of individual modules, including EJB's (see Spotswood, paragraph [0019]).

Regarding claim 5, most of the limitations of this claim have been noted in the rejection of claim 1. However, Ramme does not expressly disclose the claimed feature of "the at least one shared web module includes at least one of a web archive (WAR) file, an enterprise java bean (EJB) archive file, and a resource archive (RAR) file".

10/650,894 Art Unit: 2153

Spotswood et al, from the same or similar field of endeavors, further discloses that everything within an EAR file is considered part of the same application. Spotswood also discloses the following may be part of an EAR or can be loaded as standalone applications: An Enterprise JavaBean (EJB) JAR file; A Web Application WAR file; and/or Resource Archive (RAR) file (see Spotswood, paragraph [0049],[0050], [0051]and [0052] on page 3). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references to achieve the claimed feature of "the at least one shared web module includes at least one of a web archive (WAR) file, an enterprise java bean (EJB) archive file, and a resource archive (RAR) file" (as in claim 5). Such combination would have permitted teaching's Spotswood to allow Ramme's to better control over the reloading and namespace separation of individual modules, including EJB's (see Spotswood, paragraph [0019]).

Regarding claim 9, most of the limitations of this claim have been noted in the rejection of claims 1 and 2. However, Ramme does not expressly disclose the claimed feature of "the container uses one or more application program interfaces (APIs) to identify a path to the at least one shared web module and loads the at least one shared web module when loading the logically merged web application". Spotswood et al, from the same or similar field of endeavors, discloses EJB classes are invoked through an interface, it is possible to load individual EJB implementation classes in their own

10/650,894

Art Unit: 2153

classloader (see Spotswood, paragraph [0078]). Spotswood et al. further discloses after the redeploy command, the developer can then provide a list of files relative to the root of the exploded application that they want to update. This might be the path to a specific element, or a module, or any set of elements and modules (see Spotswood, paragraph [0080] on page 5). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references to achieve the claimed feature of "the container uses one or more application program interfaces (APIs) to identify a path to the at least one shared web module and loads the at least one shared web module when loading the logically merged web application" (as in claim 9). Such combination would have permitted teaching's Spotswood to allow Ramme's to better control over the reloading and namespace separation of individual modules, including EJB's (see Spotswood, paragraph [0019]).

Regarding claims 12 and 20, all the limitations of those claims have been noted in the rejection of claim 2. Thus, they are rejected for the same rationale as claim 2.

Regarding claims 17, all the limitations of this claim have been noted in the rejection of claim 9. Thus, it is rejected for the same rationale as claim 9.

12. Claims 6, 8, 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ramme (US Patent Application Publication No. 2003/0093420 A1) in view of Croney et al. (US Patent Application Publication No. 2004/0255233 A1) ("Croney").

10/650,894 Art Unit: 2153

Regarding claim 6, most of the limitations of this claim have been noted in the rejection of claim 1. However, Ramme does not expressly disclose the claimed feature of "determining a priority associated with the at least one shared web module" and resolving any conflicts between shared web modules in the at least one shared web. module and conflicts between the at least one shared web module and web modules of the web application, if any". Croney et al, from the same or similar field of endeavors, discloses the server system can be configured to control which of multiple master pages are utilized to form a resulting page based upon predetermined criteria that are satisfied. by the occurrence of one or more events or circumstances (see Croley et al., paragraph [0056]). Croney et al. further discloses that the modules of the server system can be configured with appropriate computer-executable instructions to recognize predetermined criteria that imposed by a master page, client system, or server system and to recognize when these predetermined criteria have been satisfied (see Croney et al., paragraph [0058]). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references to achieve the claimed features of "determining a priority associated with the at least one shared web module" and "resolving any conflicts between shared web modules in the at least one shared web module and conflicts between the at least one shared web module and web modules of the web application, if any" (as cited in claim 6). Such combination would have permitted teaching's Croney to allow Ramme's to avoid duplicating of code and content between multiple web pages and unnecessarily filling

10/650,894 Art Unit: 2153

up the storage with duplicative content (see Croney, paragraph [0007]).

Regarding claim 8, most of the limitations of this claim have been noted in the rejection of claim 1. However, Ramme does not expressly disclose the claimed feature of "logically merging the at least one shared web module with the web modules of the web application includes using a service provider interface (SPI) that provides merge logic for merging different module types". Croney et al, from the same or similar field of endeavors, discloses a user may enter commands and information into the computer through keyboard, pointing device or other input devices which are often connected to the processing unit through a serial port interface coupled to system bus. Alternatively, the input devices may be connected by other interfaces, such as a parallel port, a game port or a universal serial bus (USB) (see Croney et al., paragraph [0066]). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of the cited references to achieve the claimed feature of "logically merging the at least one shared web module with the web modules of the web application includes using a service provider interface (SPI) that provides merge logic for merging different module types" (as in claim 8). Such combination would have permitted teaching's Croney to allow Ramme's to avoid duplicating of code and content between multiple web pages and unnecessarily filling up the storage with duplicative content (see Croney, paragraph [0007]).

10/650,894 Art Unit: 2153

Regarding claim 14, all the limitations of this claim have been noted in the rejection of claim 6. Thus, it is rejected for the same rationale as claim 6.

Regarding claim 16, all the limitations of this claim have been noted in the rejection of claim 8. Thus, it is rejected for the same rationale as claim 8.

Response to Arguments

13. Applicant's arguments filed 11/16/2007 have been fully considered but they are not persuasive.

With respect to claim 1, Applicant asserts on pages 8-10 that

- a) Ramme does not determine if a web application includes a reference (see page 9, third paragraph)
- b) Ramme fails to provide identification of a location of at least one shared web module (see page 9, fifth paragraph).
- c) Ramme has nothing to do with merging application modules (see page 10, second paragraph).

The Examiner respectfully disagrees with Applicant's assessment of the prior art.

With respect to a),

Applicant admitted that Ramme provides "a reference to a directory from a directory, as shown in Figure 1 of Ramme". Examiner notes that "a link" has been interpreted as a reference to "at least one shared web module that is capable of being

10/650,894 Art Unit: 2153

incorporated into a plurality of web applications". Examiner also refers applicant to the Abstract of Ramme, wherein "Shared use of modules or software components is enable through the use of directory links". Thus, Ramme does, in fact, teach the claimed feature of "... determining if the web application includes a reference to at least one shared web module that is capable of being incorporated into a plurality of web applications".

With respect to b),

Applicant admitted that Ramme teaches "providing a link enabling a search for a file to traverse directory structures until the file is found". As previously explained in a), Ramme does, in fact, have a reference to the location of the desired file and disclose the claimed feature of "…identifying a location of the at least one shared web module" by using "a link" to access the directory upon which the module's directory depends.

With respect to c),

Applicant argues that "Ramme teaches linking directory structures together, rather than merging modules within a web application". Examiner respectfully disagrees and refers applicant to Fig. 2A and paragraph [0039] of Ramme, wherein the modules are linked in step 216.

10/650,894 Art Unit: 2153

With respect to the obviousness rejections of claims, Applicant repeatedly asserts on page 10-20 that Examiner has failed to state a prima facie and the proposed combination does not teach or suggest all the claims features of claims 2, 4, 5, 9, 12, 17 and 20 (see page 15, second paragraph) and claims 6, 8, 14 and 16 (see page 20, second paragraph) because no reason and/or motivation exists under standard of KSR Int'I to combine the references as suggested. Examiner notes that the test for obviousness in not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

For at least these reasons, Examiner substantially maintains the rejections of the claims using the cited prior arts.

10/650,894 Art Unit: 2153

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Saxton (US Pat No. 6,370,549 B1)

Carrer et al. (US Pat No. 7,185,342 B1)

Marvin (US PGPub No. 2004/0172618 A1)

Kim et al. (US PGPub No. 2004/0122912 A1)

Bellinger et al. (US PGPub No. 2003/0191826 A1)

Brayton et al. (US PGPub No. 2004/0205564 A1)

Coleman (US PGPub No. 2004/0054793 A1)

Spotswood et al. (US PGPub No. 2003/0229888 A1)

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10/650,894 Art Unit: 2153

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan P. Bui whose telephone number is (571)270-1981. The examiner can normally be reached on 8:00 AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton B. Burgess can be reached on (571)272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BB

KRISNA LIM PRIMARY EXAMINER